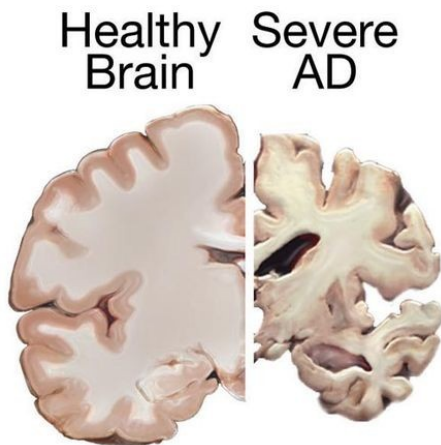


CBD and Alzheimer's disease

Dementia is a syndrome – a group of symptoms – associated with a progressive decline in brain function. It can cause problems with memory loss, thinking speed, mood, understanding, language, judgement and movement. In its most severe form, a person is completely dependent on others for basic activities of daily living, like feeding oneself.

The different kinds of dementia

The four main kinds of dementia are Alzheimer's disease, vascular dementia, Lewy body dementia (which [Robin Williams](#) had and his widow believes prompted his suicide) and frontotemporal dementia. It can affect people of any age (yes – even [children](#), who are born with it if both parents have particular gene mutations, as is true of over 700,000 children worldwide) but is most common in the over-65s. Mixed dementia – a combination of more than one kind – is oft-found. There is currently no cure, but there are medications that alleviate its symptoms, at least at an early stage.



A healthy brain and one with late-stage Alzheimer's disease. Photo: National Institutes of Health

The most common kind of dementia

Alzheimer's disease is the most common form of dementia, accounting for 60 to 70% of cases. It took its name from the German psychiatrist and pathologist Alois Alzheimer, who first described it in 1906. There are over a million sufferers in the United Kingdom and six million in the United States. It was the [leading cause of death in Britain in the last 10 years](#) and the seventh-largest in the United States. Fortuitously, it would be worth trying [CBD](#) for Alzheimer's disease.

So many studies

[The Strylian researchers Tim Karl and Carl Group](#) conducted a study of mice in 2011. It found CBD to increase the growth and development of brain cells, which reduces impairment of memory as well as other brain functions.

Another study was undertaken by the [Salk Institute for Biological Studies](#) in

San Diego, California, in 2016. This found CBD to relieve dementia by improving connections between human brain cells.

This study also showed CBD to reduce or even eliminate inflammation, oxygen build-up and brain cell decline. When the brain's immune cells don't clear blockages that occur with Alzheimer's disease, there is inflammation. The production of oxygen results. The greater the inflammation, the worse is the impact. Key brain functions, like memory, are negatively affected when more oxygen surrounds brain cells. CBD is an anti-oxidant.

The study was in vitro, ie lab-based.

In 2021, a [study conducted by a variety of institutions in Georgia in the United States](#) looked again at mice. It found CBD to work against Alzheimer's by increasing levels of the proteins IL-33 and Trem2. These improve cognitive function by eliminating dead cells and playing a part in clearing the beta-amyloid plaque and tau tangles connected with the disease. This process is phagocytosis. The increase was sevenfold in the first case and tenfold in the second. This improves both motor function and memory. Beta-amyloid generally builds up in the brain 10-20 years prior to the onset of dementia.

Scientists noticed significant improvements in the mice's ability to think when they were regularly injected with CBD. Notably, the mice were better able to differentiate between old and new objects. Their movement also improved. People with Alzheimer's often grow stiff, which limits their ability to walk.

The Alzheimer's Society doesn't believe CBD works here

In the United Kingdom, the [Alzheimer's Society](#) is strongly against the efficacy of CBD against Alzheimer's disease. This is because what studies there have been were of animals or, if of humans, were small or what it considered to be low quality. It also condemned these studies for being short-term. It would be welcome to have studies that overcome these objections.